

THE AUSTRALIAN *STRONGYLINÆ* AND OTHER
TENEBRIONIDÆ, WITH DESCRIPTIONS OF NEW
GENERA AND SPECIES.

(Family TENEBRIONIDÆ.)

BY H. J. CARTER, B.A., F.E.S.

(With nine text-figures.)

The species of the Australian *Strongyliinæ* are rare in collections, and are often confused with the *Cistelidæ*, from which they can be readily distinguished by their non-lamellate tarsi and non-pectinate claws. There are only three existing genera, to which I propose to add two more. These five genera may be tabulated as follows.

Genera of the Australian *Strongyliinæ*.

1. Procoxæ not contiguous.
2. Prothorax with explanate margins. *Tyndarisis* Pasc.
3. Prothorax without explanate margins.
4. Prothorax twice as wide as long, with slight transverse convexity.
5. Sides of prothorax dentate in middle *Notostrongylium*, n.gen.
6. Sides of prothorax not dentate. *Pseudostrongylium* Kraatz.
7. Prothorax not twice as wide as long, with strong transverse convexity. *Strongylium* Kirby.
8. Procoxæ contiguous. *Notolea*, n.gen.

Tyndarisis longitarsis Pasc., is described as copper-brown in colour; and I have a specimen that is so from Dorrigo, N.S.W. More often, however, it is mottled with a grey pubescence, giving it a close likeness to *Lepispilus sulcicollis* Boisd. It may be readily separated, however, from this species by its greater length, narrower form, and the extremely long anterior tarsi. It is common in the mountain-districts of New South Wales and Victoria, and I have a specimen from Tasmania.

Pseudostrongylium viridipenne Kraatz.—I think I have correctly identified this species in a rather common insect from Cooktown, Cairns, and other North Queensland districts. Mr.

H. Hacker took a large number, and it is found in most collections. It is very variable in the colouration of the elytra, this being sometimes entirely peacock-blue, or green, sometimes with the suture, sides, and base red or yellow; or the red colour may largely pervade the elytra.

Strongylium.—After an examination of Macleay's types of *S. ruficolle* and *S. Mastersi*, there only remained three species to identify, viz., *S. australe* Mäkl., *S. reticulatum* Mäkl., and *S. Macleayi* Pasc. I think I have a species of *S. australe* from Kuranda. *S. Macleayi* (from Cairns, and other Queensland districts) is readily determined from specimens in the Melbourne and Adelaide Museums. *S. reticulatum* Mäkl., determined from description, evidently belongs to a different genus, described below as *Notostrongylium*. I have taken this at Blackheath, Blue Mountains, under bark, and in the Victorian Alps, under a stone. The following new species are now described and tabulated.

NOTOSTRONGYLUM, n.gen.

Form shorter and more convex—especially longitudinally—than in *Strongylium*. Prothorax rugose, the sides toothed in the middle or angulately widened. Elytra coarsely foveate-punctate, or reticulate, antennal joints stout and subtriangular.

I propose this genus for the reception of three species whose form and sculpture separate them from the typical *Strongylium*. The three species may be tabulated as follows.

Notostrongylium.

1. Body closely covered with short brown hair..... *fuscovestitum* Cart.
- 2(4) Body smooth.
3. Prothorax toothed in middle, elytra without reticulation.....
..... *rugosicolle*, n.sp.
4. Prothorax angularly widened in middle, elytra reticulate.....
..... *reticulatum* Mäkl.

NOTOSTRONGYLUM RUGOSICOLLE, n.sp.

♂. Elongate, convex, robust; glabrous, dark brown, head and prothorax opaque, elytra and underside subnitid, oral organs, basal joints of antennæ, tibiæ and tarsi red, femora reddish-brown, apical joints of antennæ infuscate.

Head: epistoma densely punctate, rounded in front, limited behind by wide shallow depression, canthi elevated into a nitid knob impinging on the eyes; the latter large, subapproximate, separated by a space less than half the diameter of one, forehead between eyes rugose. *Antennæ*: joint 1 robust, 2 bead-like, 3 slightly longer than 1 and 2 combined, 3-7 gradually shorter and stouter, a little enlarged at apex, 8-10 equal, 11 as long as 10, but narrower and bluntly rounded. *Prothorax* 3 × 4 mm., very convex, widest at middle, this width emphasised by a short lateral tooth, apex truncate, base bisinuate, wider at base than

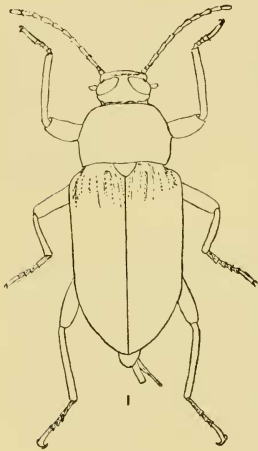


Fig.1.

Notostrongylium rugosicolle.

at apex, sides well rounded, obtuse anterior angles depressed, posterior angles (seen from above) acute and slightly produced backwards, base with folded margin sulcate within, lateral and apical margin narrow; disc coarsely rugose, the medial line only indicated by finer rugosity, a shallow foveate depression near base on each side. *Scutellum* large, curvilinear-triangular, coarsely punctate, with a smooth middle line. *Elytra* convex, considerably wider than prothorax at base and three times as long, shoulders prominent, squarely rounded, sides a little constricted in middle, sharply tapering and rather strongly declivous at apex; coarsely punctate-striate, with nine rows of large, deep, square punctures set closely, besides a short scutellary row and a lateral row of smaller punctures, the seriate punctures continuous but becoming smaller to the apex, intervals subcostate, especially the 2nd and 3rd, and slightly crenulate on the outside; the 1st and 3rd joining to form a rounded ridge on each side of the scutellum. Pro- and mesosternum with rather large punctures, metasternum and abdomen more finely punctate; the latter with short, sparse pubescence. Posterior intercoxal process widely triangular; femora coarsely punctate, tibiæ and tarsi

with pale red pubescence, posterior tarsi with 1st and claw-joint subequal. *Dimensions*, 13 × 5 mm.

♀. Wanting.

Hab.—Claudie River, North-East Queensland.

A single specimen, from the Melbourne Museum, is an ally of *N. fuscovestitum* mihi, but is wider and more convex, especially in the prothorax, while without the strong hairy clothing of that species. The lateral tooth of the prothorax is more pronounced than in *N. fuscovestitum*. Type in the National Museum, Melbourne.

The following is a table of the Australian species of *Strongylium*.

Strongylium Kirby.

- 1(5) Colour more or less metallic.
2. Head, prothorax, and elytra green-bronze..... *australe* Mäkl.
- 3(5) Head and prothorax black, elytra blue.
4. Size larger (12-14 × 5 mm.), intervals of elytra nearly flat... *Macleayi* Pasc.
5. Size smaller (9·5 × 3 mm.), elytra faintly cyaneous, intervals sharply convex..... *corrugatum*, n.sp.
- 6(12) Colour non-metallic, elytra black.
7. Prothorax red..... *ruficollis* Macl.
- 8-12. Prothorax black.
9. Elytral intervals flat..... *Mastersi* Macl.
- 10(13) Elytral intervals more or less convex.
11. Pronotum minutely punctate, legs very long..... *longipes*, n.sp.
12. Pronotum distinctly, not closely nor deeply punctate..... *cylindripennis*, n.sp.
13. Pronotum densely and deeply punctate..... *punctithorax*, n.sp.

STRONGYLIUM LONGIPES, n.sp.

Elongate, subcylindric, nitid-black, tarsi, apical joint of antennæ and edge of maxillary palpi red.

Head very finely punctate, more closely on the epistoma than on forehead, the former rounded in front, the canthi strongly raised and impinging on the eyes; these large and approximate, in the ♂ only separated in front by a thin carina triangularly widened behind, in the ♀ the space between eyes about 0·7 mm. Antennæ: joint 1 stout, 2 half as long as 1, 3 and 4 subequal, 4-8 gradually shorter and wider (at apex), 9-10 of same length

but not as wide as 8, 11 narrower than 10, widened at apex. *Prothorax* 3 × 3 mm., subtruncate at apex and base, sides faintly rounded, and arcuately converging in front without angles, posterior angles subrectangular, basal margin with a strong fold sulcate within, apical margin raised, lateral margin scarcely

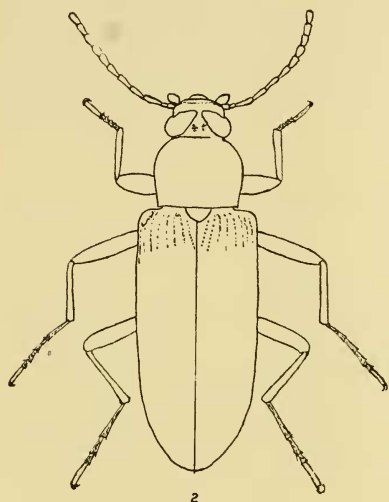


Fig. 2. —*Strongylium longipes*.

evident from above, disc almost microscopically punctate, medial furrow clearly impressed. *Scutellum* rather widely triangular, raised in middle, smooth. *Elytra* parallel, moderately convex, considerably wider than the prothorax at base and nearly four times as long, shoulders prominent and rounded; subsulcate-punctate, with nine rows, besides a short scutellar row of rather large, round punctures, somewhat closely placed in sulci, the intervals smooth and strongly raised, those near the

suture costate, becoming less convex laterally, the punctures becoming subobsolete and the intervals flatter towards apex. Underside apparently quite lævigata; legs very long, posterior tarsi with basal joint not as long as the rest combined. *Dimensions*, 14 × 4.5 mm.

Hab.—Mackay and Cairns (North Queensland), (?) Sydney (New South Wales).

Five specimens examined, 3 ♂, 2 ♀. It is widely separated from the only nitid-black species so far described from Australia (*S. Mastersi* Macl.) in its larger and more elongate form, and having strongly raised intervals on the elytra. Superficially, it is very like *Homotrysis (Allecula) subsulcata* Macl. One of the specimens in Mr. Lea's collection is labelled Sydney, and differs from the Queensland examples in having less raised elytral

intervals, with smaller seriate punctures; but, at present, I can only consider it as a variety. Type in the National Museum, Melbourne.

STRONGYLUM CYLINDRIPENNE, n.sp.

Elongate, cylindric, nitid-black, tarsi, a few basal and the apical joint of antennæ red, rest of antennæ obfuscate, legs reddish-brown.

Head vertical, wide as prothorax across the eyes, epistoma convex, arcuate in front with deep suture behind, rather strongly and closely punctate, eyes in ♂ almost contiguous, in ♀ more widely separated, eyes large, occupying the greater part of front, scarcely impinged upon by the small nodular canthus. Antennæ long, gradually but not greatly enlarged towards apex, basal half sublinear, 3 longer than 4, 8-10 longer than wide, moderately enlarged at apex, 11 ovate. *Prothorax* very convex, widest at base, subparallel on basal half, slightly arcuately narrowed at apex, subtruncate at apex and base, anterior sides depressed and rounded, posterior angles subrectangular and deflexed, basal margin folded, apical margin narrow, lateral margins not visible from above, disc distinctly and rather closely punctate, with two small discal and three small basal foveæ. *Elytra* convex, wider than prothorax at base and three times as long, shoulders rounded, sides parallel; striate-punctate, the striæ well-defined, and becoming sulcate laterally, the first two striæ wider than the rest and continuous to apex, the punctures in striæ large and close, intervals convex (3rd, 4th, 5th, and 6th subcarinate) and quite smooth. *Epipleuræ* narrow and concave, prosternum coarsely punctate, metasternum and abdomen smooth nitid-black. Legs of moderate length, posterior tarsi with first joint longest, but not as long as the rest combined. *Dimensions*, 9.5 × 2.5 mm.

Hab.—Tambourine Mt., Queensland, and Sydney, N.S.W.

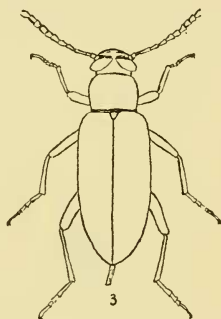


Fig. 3.
S. cylindripenne.

Var. A. Larger (10.5×3 mm.), with the elytral intervals less convex, and the seriate punctures rather smaller. (Labelled Sydney in Coll. Lea).

The ♂ and ♀ types are in my own Coll., the ♂, given me by Mr. H. W. Brown, without a locality-label (probably Queensland), the ♀ taken by myself at Tambourine Mountain. It is easily distinguished from *S. Mastersi* MacL., by its raised elytral intervals and more cylindrical form. In this, it superficially resembles some species of *Anaxo*. Types in the author's Coll.

STRONGYLUM CORRUGATUM, n.sp.

Elongate, cylindrical, nitid-black, elytra with faint cyaneous reflections, apical joints of antennæ opaque black.

Head finely and densely punctate on epistoma, canthus much larger than in the preceding species (*S. cylindripenne*), eyes large

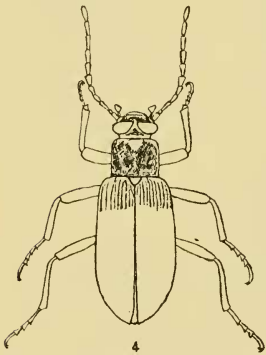


Fig. 4.

Strongylium corrugatum.

and subcontiguous, the separating lamina very narrow in front, triangularly widening behind, with a small fovea and sparse punctures thereon; antennæ with basal joints much stouter than in the preceding, joint 3 slightly longer than 4, and tumid at apex, first five joints nitid, 6th joint widest, succeeding joints elongate, 11th elongate-ovate. Prothorax very convex anteriorly, wider than long, and somewhat rectangular in outline, of same width (2 mm.) as head between the eyes, subtruncate at base and apex, sides parallel, anteriorly rounded and depressed,

posterior angles rectangular, basal margin thickly folded and sulcate within, the sulcus terminating each way in a fovea, apical margin raised, lateral margins not evident from above; disc apparently lævigata (really microscopically punctate), without medial line. Scutellum equilatero-triangular, punctate. Elytra wider than prothorax at base and about three times as long, sides subparallel anteriorly, slightly widened behind middle,

shoulders rounded, the surface more depressed than in *S. cylindripenne*; punctate-sulcate, all intervals subcarinately raised, the sulci deep throughout, the punctures therein small and half-hidden, intervals lævigata; prosternum sparsely, abdomen very finely punctate, meso- and metasterna lævigata except on their episterna, posterior tarsi with basal joint shorter than usual (as long as the 2nd and 3rd combined). *Dimensions*, 9.5 × 3 mm.

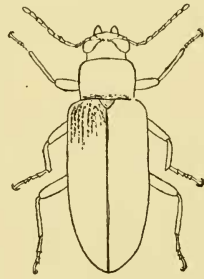
Hab.—Port Darwin, North Australia.

Two specimens, both I think ♂, in Mr. Lea's collection. Compared with *S. cylindripenne*, the antennæ and legs are darker, the former much stouter, with joints of different proportions, prothorax almost lævigata, the elytra more evenly and deeply sulcate, the punctures therein smaller and half-hidden, and the form is more depressed. Type in Coll. Lea.

STRONGYLUM PUNCTITHORAX, n.sp.

Elongate, cylindric, nitid-black, elytra with a reddish tinge, oral organs, antennæ, legs, and underside red.

Head very densely and strongly punctate, shape as in *S. cylindripenne*, eyes of ♂ close in front, space rapidly widening behind, of ♀ separated by a space greater than half the diameter of an eye; antennæ very slender and short, the joints sublinear, 3 longer than 4, 5-7 successively shorter, 8-11 subequal. *Prothorax* less convex than in the two preceding species, the outline as in *S. corrugatum* except that the base is slightly sinuate, and the sides with a slight incurving tendency posteriorly, with the posterior angles acute and a little produced, disc densely punctate, the punctures round, deep, and crowded; the basal and apical margins of nearly equal width, the former with a wide transverse sulcus within, terminated by rather large basal foveæ; also a shallow longitudinal sulcus near the extreme sides. *Scutellum* large, curvilinear-triangular, coarsely punctate. *Elytra* wider than prothorax at base and three times as long, sub-



5

Fig. 5.

S. punctithorax.

cylindric, shoulders rather squarely rounded, striate-punctate, the punctures in series, large and somewhat square, becoming larger towards sides, smaller towards apex, and separated by irregular, subcancellate, transverse strigæ, the sutural stria wider than the rest and almost devoid of punctures except near base, intervals convex and finely punctate. Prosternum rather thickly covered with large, round punctures, meso- and metasternum with smaller punctures more sparsely scattered, abdomen finely but distinctly punctate; legs shorter and more slender than usual; posterior tarsi with basal joint as long as the rest combined. *Dimensions*, 10×3.5 mm.

Hab.—Jenolan Caves district, New South Wales; and Brisbane, Queensland.

Two specimens—the sexes—in Coll. Lea, are easily separated from the two preceding species by the densely and coarsely punctured head and prothorax. The elytra are not so deeply or so regularly striate as in *S. corrugatum*, but more so than in *S. cylindripenne*, while the seriate punctures are of about the same size as in the latter species, but squarer and even more closely placed. From *S. Mastersi* Macl., easily differentiated by the punctured thorax and convex elytral intervals, the same being quite flat in *S. Mastersi*. Type in Coll. Lea.

NOTOLEA, n.gen.

Elongate, parallel, depressed. *Head* vertical, triangular; *mandibles* bifid at apex; *mentum* cordate, notched above; *maxillary palpi* long, joint 1 linear, 2 obconic, 3 triangular, last joint securiform; *labial palpi* with last joint subtriangular with rounded angles, notched and spinose on inside; *antennæ* very long, joints linear; eyes widely separated. *Prothorax* transverse, subcordate, with narrow carinate margin throughout, laterally separating propleuræ from pronotum. *Elytra* depressed, subcostate with transverse reticulation, closely irregularly punctate. *Epiplauræ* narrow. *Prosternum* very short, procoxæ large, globular, and contiguous, occupying nearly the whole space between base and apex near the middle, without any separating lamina, or produced prosternum; midcoxæ very close, the post-intercoxal pro-

cess small and sharply triangular. Metasternum briefly longitudinally sulcate at apex. *Legs* long and slender, tibiæ slightly enlarged, with a small spine at apex, tarsi with penultimate joint very short, posterior with 1st joint not as long as the rest combined.

A genus separated from any of the described genera in Mäklin's monograph by the different prosternum with its contiguous coxæ, and widely distinct in form and sculpture from the other described Australian Strongyilia. At first, it seemed a possible member of the *Ædemeridæ*, but the anterior coxal cavities closed behind preclude this.

NOTOLEA LIMBATA, n.sp.

Elongate, parallel, depressed, reddish-brown, glabrous, subnitid; elytra with a wide pale red or flavous margin, oral organs, antennæ, and legs red.

Head coarsely and rather closely punctate, labrum strongly produced, epistoma rounded and raised in front, concave behind,



Fig. 6a.*

Fig. 6b.†

limiting suture scarcely defined, canthus small and nodular, eyes moderately large, separated by a distance greater than the diameter of one eye; antennæ slender, joint 1 very stout, 2 half as long as 1, 3 not as long as 4 and 5 combined, 4-8 subequal, 9-10 slightly wider than preceding, 11 elongate-ovate.

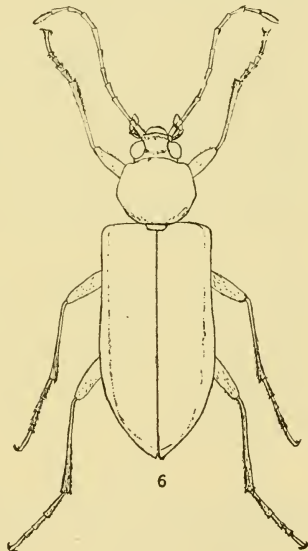


Fig. 6. — *Notolea limbata*.

* Mentum, palpi, labium, and mandibles of *Notolea limbata*.

† Antenna of same, ♂.

Prothorax subcordate and rather flat, widest at middle, bisinuate at apex, the rounded anterior angles a little produced, sides arcuately widening from apex to the middle, then subangularly narrowed, in a wide curve, posterior angles obsolete, base narrow and subtruncate; disc everywhere densely punctate, the punctures round and deep. *Scutellum* transverse, oval, punctate. *Elytra* much wider than prothorax at base and nearly three and a half times as long, shoulders prominent and rather square, sides a little compressed before and widened behind the middle, a narrow lateral raised border not evident from above; each elytron with about four subobsolete costæ, the 2nd and 3rd most apparent, posterior half of elytra with irregular lightly raised reticulation (somewhat as in *Lepispilus*), the whole surface (including costæ, transverse strigæ, and interspaces) crowded with round punctures without any seriate arrangement, the irregular raised surface at the sides on the pale-coloured margins showing large smooth spaces; whole underside densely punctate and glabrous, legs with sparse clothing of short yellow hairs on underside, tarsi pilose. *Dimensions*: ♂, 12 × 4 mm.; ♀, 15 × 5 mm.

Hab.—Mount Horror, Tasmania (O. L. Adams, per A. M. Lea), also Tasmania (Coll. Blackburn).

Three specimens examined, one ♂, two ♀, of this interesting species, the ♀ specimens being larger, with thicker antennal joints and a prominent ovipositor. The characters diagnosed above show an insect widely separated from any hitherto described member of the subfamily. Type ♂ in Coll. Lea; ♀ in Coll. Carter.

GONOCEPHALUM ALTERNATUM, n.sp.

Shortly ovate, opaque-brown with asperate derm.

Head with epistoma rounded in front, excised in the middle, the canthus impinging on the eyes beyond halfway, the width of the exterior piece about equal to the diameter of an eye, surface finely shagreened. Antennæ rather short, joint 3 twice as long as 4, 4-8 successively shorter and wider, 9-10 very transverse, 11 widely ovate. *Prothorax* very transverse and widely horizontally explanate, anterior foliation produced (in normal position

of head) to meet the canthus, anterior angles subrectangular, sides widely rounded, then strongly sinuate before the acute, slightly deflexed posterior angles; widest at middle, base strongly bisinuate, disc and foliation closely granulose, without raised border, a transverse depression just behind the apex. *Scutellum* small, curvilinear-triangular. *Elytra* ovate, wider than prothorax at base, shoulders pronounced and obtuse, each elytron with 9 rows (including the sutural row) of small raised shining nodules, the sutural, 3rd, 5th, 7th, and 9th consisting of double rows, the alternate costæ consisting of single lines of similar nodules; interspaces uneven (under a Zeiss binocular seen to be obscure rows of shallow foveate depressions). Underside finely rugose, fore-femora tumid, fore-tibiæ enlarged at apex and clothed with short bristles, middle and hind tibiæ not enlarged at apex. *Dimensions*, 8.5 × 4.5 mm.

Hab. — Raine Island, North-East Queensland.

A single ♂, in the Melbourne Museum, is a close ally of *G. costipenne* mihi in its elytral sculpture, but differs from it in (1) larger size, (2) absence of vitreous spots, and hairy clothing, (3) foliation of prothorax, horizontal throughout, with anterior angles rather sharply rectangular. Type in National Museum, Melbourne.

Gonocephalum costatum Cart.—In describing this species (Trans. Roy. Soc. S. Austr., 1914, p.222), I overlooked the pre-occupation of this name for a European species (*G. costatum* Brll.). I therefore propose the name *costipenne* for my species.

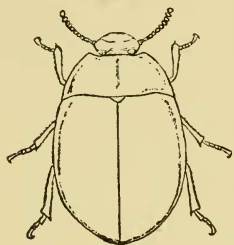
G. Meyricki Blackb., = *G. victoriæ* Blackb.—I have examined cotypes of these in the South Australian Museum, and can find no valid distinction.

Titæna pulchra Bates.—In my tabulation of the genus (Proc. Linn. Soc. N. S. Wales, 1915, p.102) I omitted this species. It would come in this table after *T. tyrrhena* mihi, from which it can readily be distinguished by size alone, 7 mm. long.

PTEROHELEUS SERICEUS, n.sp.

Ovate, black, glabrous and subopaque, antennæ and tarsi reddish.

Head and pronotum very densely and finely punctate, epistoma straight in front, sides obliquely raised to the canthus, limiting suture faintly impressed, eyes rather widely separated, antennæ short, joints submoniliform, apical four transverse, the last nearly spherical. *Prothorax* 2 × 4 mm., anterior angles widely obtuse but advanced, sides arcuately diverging to base, posterior angles



7

Fig. 7.

Pterohelaus sericeus.

acute and strongly produced backwards, base bisinuate, explanate margins horizontal but punctured like disc, extreme border not raised, central line depressed and sub-lævigatæ. *Scutellum* transversely triangular, punctate. *Elytra* convex, of same width as prothorax at base and nearly three times as long, ovately widened to beyond halfway, and widely rounded behind, lateral margins horizontal, moderately wide, but contracting towards apex, extreme border raised; a well marked line of

lateral punctures, and some very indistinct lines of punctures on disc becoming obsolete towards suture; surface generally uneven, with some almost obsolete wavy costæ, the whole surface densely covered with minute punctures presenting a subopaque and silky appearance, underside minutely and closely punctate, with some larger punctures sparsely scattered on sternum, tibiæ serrated on outside, especially the protibiæ. *Dimensions*, 9 × 5 mm.

Hab.—Banana, Queensland (E. Barnard, per Mrs. Hobler).

Two specimens, sex doubtful, differ from all described species in sculpture, and in the finely serrated tibiæ. Indeed, this latter character suggests generic distinction. In shape, like *P. ovulus* Haag Rut.; in sculpture, nearest to *P. nitiduloides* mihi, near which it should be placed. Type in the author's Coll.

OMOLIPUS Pasc.

Synonymy.—*O. corvus* Pasc., = *O. grandis* Macl. *O. cyaneus* Pasc., = *O. chalybeus* Geb. *O. oblongus* Bates, = *O. affinis* Geb.

Macleay's species, *O. grandis*, is only a large-sized case of *O. corvus* Pasc., a common species round Brisbane, and in Southern

Queensland. Pascoe gives Melbourne as the locality, but I have not seen any specimens taken south of Sydney. It may be noted that all the species of *Omolipus* are subject to great variation in size.

There seems to me little doubt as to the above names being synonymous. I have seen a large number of examples from various parts of West Australia which present the slight colour-variation on which Gebien founded his *O. chalybeus*. Pascoe says of *O. cyaneus* "legs . . . reddish," while in *O. chalybeus* they are black. In most of the blue species, there is a tendency to redness on the underside and appendages, especially in slightly immature examples. Gebien seems not to know *O. oblongus* Bates, and states, in his tabulation of the species, that the colour is dark green. Bates says in the description "dark green with a chalybeate tinge." I have cotypes of this, which are quite blue. My specimens of *O. cyaneus* Pasc., were compared with type. The differences noted by Gebien between *O. chalybeus* and *O. affinis* are exactly the differences which exist between *O. cyaneus* Pasc., and *O. oblongus* Bates, the apex of prosternum bent upwards in *O. cyaneus*, downwards in *O. oblongus*. As Gebien's table is incomplete, I append a tabulation of the genus.

Group i. Species with short mesosternum, form ovate.

- 1(7) Colour black.
- 2(4) Surface nitid.
3. Elytra striate-punctate, seriate punctures large..... *socius* Pasc.
4. Elytra seriate-punctate, seriate punctures very small..... *lævis* Pasc.
- 5(7) Surface (especially pronotum) subopaque.
6. Size large, seriate punctures irregular in size and distance...*corvus* Pasc. ;
..... *grandis* Macl.
7. Size small, seriate punctures round and regular..... *gnesioides* Pasc.
8. Pronotum violet, elytra blue. *bimetallicus*, n.sp.

Group ii. Species with long mesosternum, form elongate.

9. Whole surface black..... *parvus* Bates.
- 10(13) Upper surface blue.
11. Elytra clearly striate-punctate, seriate punctures small.. *angustus*, n.sp.
12. Elytra substriate-punctate, intervals convex, seriate punctures
large and round..... *cyaneus* Pasc.; *chalybeus* Geb.

13. Elytra seriate-punctate, intervals flat, seriate punctures elongate and smaller than in 12..... *oblongus* Bates; *affinis* Geb.
 14. Prothorax black, elytra blue..... *cyaneipennis* Champ.
 15. Prothorax black, elytra dark bronze..... **submetallicus* Geb.

OMOLIPUS BIMETALLICUS, n.sp.

Oval, convex (longitudinally and transversely), head and pronotum brilliant metallic-violet, the base and apex of the former suffused with blue; elytra, legs, and underside a rich deep blue, very nitid; antennæ and tarsi reddish-brown, apical 4 joints of the former opaque.

Head densely and finely punctate, epistoma rounded in front, depressed below the level of the convex forehead, and clearly separated from it by an arcuate suture; antennæ not extending to base of prothorax, joints 3 and 4 slightly elongated (3 longer than 4), the remaining joints bead-like and successively wider, 8-10 transverse, 11 longer and wider than 10.

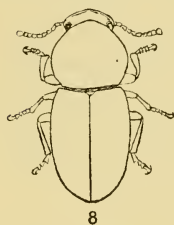


Fig. 8.—*Omolipus bimetallicus*.

Prothorax. (of ♂) 3 × 4 mm., very convex, apex slightly advanced in the middle, base truncate, anterior sides depressed, angle obsolete, posterior angles widely obtuse, sides very widely rounded without any sinuation, basal margin raised, lateral margin not evident from above, disc very closely and finely punctate without depression or medial line. *Scutellum* very small and transverse. *Elytra* ovate, convex, of same

width as prothorax at base, and about twice as long, gradually enlarging behind base to beyond halfway, with a steep apical declivity; seriate-punctate, the suture showing an obscure striation, punctures in series round, regular, smaller than in *O. oblongus* Bates, larger than in *O. angustus* (*infra*), not very closely placed, intervals flat and apparently quite impunctate (under a Zeiss binocular, minute sparse punctures can be seen); underside closely, minutely punctate, submentum transversely rugose, prosternal intercoxal process produced downwards. *Dimensions*: ♂, 9 × 4½ mm.; ♀, 6 × 3 mm.

Hab.—Oempelli, East Alligator River, North Australia.

* Species unknown to me.

Two specimens, from the Melbourne Museum, show the most beautiful species of the genus in its brilliant metallic contrast of two colours. The colouration is much as in *Chariothes Besti* Blackb., except that the colours of the pronotum and elytra are reversed. It is the only metallic (non-black) species belonging to Gebien's 2nd section "with short mesosternum." The larger specimen is, I think, ♂ from its enlarged penultimate tarsi. I find no other sexual character. Type in the National Museum, Melbourne.

OMOLIPUS ANGUSTUS, n.sp.

Whole upper surface bright blue, nitid, underside darker blue; antennæ, legs, and underside of head reddish, upper surface of femora blue.

Head closely punctate on epistoma, more sparsely and closely on forehead, rounded in front, epistomal suture rather indistinct; antennæ with apical 4 joints wider than the rest, 8-10 subspherical, 11 widely oval, twice as long as 10. *Prothorax* 2.5 × 3 mm., very convex laterally, widest at middle, considerably narrowed anteriorly, slightly so posteriorly, strongly produced forward in the middle at apex, base truncate, anterior sides depressed and without angles, posterior angles widely obtuse without previous sinuation, sides moderately rounded, disc closely but not deeply punctate. *Scutellum* transverse, oval, reddish. *Elytra* subcylindric, of same width as prothorax at base and less than twice as long, sides slightly widening behind prothorax, apical declivity moderate, lateral margins not evident from above; striate-punctate, the striæ clearly cut throughout, the punctures therein small and close, intervals slightly convex and nearly smooth, with a few sparsely scattered microscopic punctures; abdomen minutely punctate, with a row of larger punctures at the apex of each segment; underside of head and prosternum slightly rugose, prosternal intercoxal process very small and not produced. *Dimensions*, 8 × 3 mm.

Hab.—Cue, West Australia (Mr. H. W. Brown).



Fig. 9.
O. angustus.

A specimen (sex ?), given me by its captor, differs from the other blue species in its narrower and more depressed form, more clearly defined striæ, finer seriate punctures (finer than in any species except *O. laevis* Pasc.), the prolonged and narrowed antero-prothorax and brighter colour. Type in author's Coll.

In the publication of my paper on "Revision of the *Cypha-leinæ*" (These Proceedings, 1913), the description of one new species, *Platyphanes cyaneipennis*, was inadvertently omitted, though mentioned in the table of the genus. I, therefore, include its description below.

PLATYPHANES CYANEIPENNIS, n.sp.

Elongate-parallel, moderately convex; head and prothorax black, elytra dark blue, nitid; underside and legs black, antennæ and tarsi brown, the last three joints of the former castaneous.

Head evenly and clearly punctate, epistoma straight in front, obliquely rounded at sides, forehead convex, eyes separated by a space less than the transverse diameter of one eye. Antennæ with joints 3-7 gradually shorter and stouter, 3 little longer than 4, subcylindric, apical four joints rounded and transverse. *Prothorax* rather flat, slightly wider at base than at apex, glabrous, rather closely and finely punctate, with small, smooth spaces near middle; disc without medial line or impression, arcuate-emarginate at apex, bisinuate at base, anterior angles advanced, less than 90°, but slightly blunted at apex, sides feebly rounded, a little incurved near base, posterior angles obtuse (about 100°), lateral border raised, subsulcate within. *Scutellum* triangular with rounded sides, punctate. *Elytra* wider than prothorax at base and three and three-quarter times as long, with narrow, horizontal, lateral border becoming obsolete at apex, humeral callus well marked; striate-punctate, each elytron with ten rows, besides a short scutellary row of punctures somewhat irregular in size and spacing, the sixth row consisting of smaller punctures confusedly jumbled; intervals and striæ wide, the former smooth,

convex at middle and sides, becoming flatter towards apex. *Prosternum* subpustulose, meso- and metasternum nearly smooth, their episterna with a few large punctures; abdomen finely punctate, becoming finer towards apex; posterior tarsi with claw-joint as long as the rest combined. *Dimensions*, 21 × 9mm.

Hab.—Tambourine Mountain, South Queensland.

Two specimens under examination are both, I think, ♀. The species is nearest to *P. oblongus* Waterh., and *P. chalcopteroides* mihi, from both of which it may be distinguished by colour, the much more elevated elytral intervals, and the larger seriate punctures. Type in Coll. Carter.